an active layer 230 and a second semiconductor layer 240. As shown in FIG. 1B, an adhesive layer 250 is formed on the second semiconductor layer 240 and a substrate 260, i.e. a transparent substrate, is formed on the adhesive layer 250 subsequently. The adhesive layer 250 adheres the substrate 260 on the second semiconductor layer 240.

CME 12/28/07

As shown in FIG.1C, the substrate 210 is removed and then the opto-electronic device is turned over. The substrate 210 is removed by a lapping process, an etching process, or both of the lapping process and the etching process. There may be an etching stop layer formed between the opto-electronic layer and the substrate 210 for stopping etching.

A structure for emitting light being not shown in FIG. 1C is defined within the opto-electronic layer according to a pattern of a photoresist layer formed on the opto-electronic layer, wherein the photoresist layer is not shown in FIG. 1C either. To form the structure for emitting light, portions of the first semiconductor layer 220, portions of the active layer 230 and portions of the second layer 240 are etched in an etching process, e.g. a dry etching process or a wet etching process, as shown in FIG. 1D..

As shown in FIG. 1E, electric conductive elements, e. g. an electrode 270 and an electrode 280, are formed on the first semiconductor layer 220 and the second semiconductor layer 240 respectively by an electron beam evaporation process, a sputtering deposition method, thermal evaporation process or another kind of deposition method. Subsequently, the opto-electronic layer and the electrode 270 and 280 are treated through a solid state growth process, i.e. SPR process, to form ohmic contact between the electrode 270 and the first semiconductor layer 220, and between the electrode 280 and the second semiconductor layer 240.

The order for forming the electrodes 270 and 280 and ohmic contact between